

Seven New Species of The Genus *Polypedilum* (Diptera : Chironomidae) from Japan

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ABSTRACT

Seven new chironomid species belonging to three subgenera of the genus *Polypedilum* were described on the basis of adult male morphology. Among these, five species, *P. akisplendens*, *P. albiventris*, *P. crassistyla*, *P. fuscovittatum* and *P. paranigrum* were members of the subgenus *Polypedilum*. *P. pseudomasudai* and *P. bingoparadoxum* were members of the subgenera *Tripodula* and *Uresipedilum*.

Key words : adult male, Chironomidae, description, morphology, *Polypedilum*

INTRODUCTION

Polypedilum KIEFFER, 1912 is a huge genus among the family Chironomidae (Diptera). It consists of the three subgenera, *Polypedilum*, *Tripodula* and *Uresipedilum* (SASA and KIKUCHI, 1995), each comprising many species living in a variety of inland waters. In Japan, 56 species belonging to this genus have been recorded to date (e.g., TOKUNAGA, 1938 ; SASA, 1983, 1989a, 1989b ; SASA and HASEGAWA, 1983 ; NIITSUMA, 1991, 1992a, 1992b).

Some species of this genus have been suggested as promising candidates for biological indicators of water quality (KAWAI *et al.*, 1996b). On the other hand, one species, *P. nubifer*, has been reported to be a potent allergen for humans (KAWAI *et al.*, 1996a). Nevertheless, taxonomical as well as ecological studies on the genus appear to be far from sufficient for its application to various fields of research in Japan.

In this study, seven new species of the genus collected from some rivers in Japan were described on the basis of adult male morphology.

MATERIALS AND METHODS

Adult chironomids were collected by two methods ; collection of adults emerging from larvae or pupae attaching to artificial substrates submerged on the bottom of rivers (EM), and collection of adults attracted to lights emitted by vending machines, etc. along riverbanks (LT). Only male adults were used for identification and description, whereas females were not used due to difficulty in their correct identification.

Males, preserved as dried specimens, were mounted according to the

method described by SASA *et al.* (1980), and identified. In summary, wings were cut off and mounted as dry material, while the rest of the body was boiled in 10% KOH solution, washed in water and mounted in gum-chloral solution after dissection. The gum-chloral solution was prepared by dissolving 30 g of chloral hydrate and 8 g of gum arabic in a mixture of 1 ml of acetic acid glacial, 3 ml of glycerin and 10 ml of distilled water.

Type materials are deposited in the Laboratory of Ecology, Faculty of Applied Biological Science, Hiroshima University, Japan.

The terminology and abbreviations according to SASA and KIKUCHI (1995) were used in the descriptions of species. Abbreviations indicate the following measurements and ratios.

BL : body length as the combined length in mm of thorax and abdomen in slide-mounted specimens, WL : wing length as the distance in mm between wingtip and arculus, AR : antennal ratio, obtained by dividing the length of the last antennal segment by the combined length of the remaining flagellar segments (not including pedicel), ER : eye ratio, obtained by dividing the distance between dorsomedial corners of two eyes by the height of an eye, SO : number of supraorbital setae on one side, CL : number of clypeal setae, PN : number of setae on antepnotum on each side, DM : number of dorsomedial setae on scutum, DL : number of dorsolateral setae on each side of scutum, SA : number of supraalar setae on each side of scutum, PA : number of prealar setae on each side of scutum, SC : number of setae on scutellum, SQ : number of fringe setae on squama, LR1 : front leg ratio, obtained by dividing the length of front tarsomere I by the length of front tibia, LR2 : ratio obtained by dividing the length of middle tarsomere I by the length of middle tibia, LR3 : ratio obtained by dividing the length of hind tarsomere I by the length of hind tibia, TR1 : ratio obtained by dividing the length of front tarsomere V by the length of front tibia, BR1 : front beard ratio, obtained by dividing the length of the longest seta on front tarsomere I by the diameter of the segment at the base of the hair, BR2, BR3 : same, referring to the beard ratios of middle and hind tarsomeres I.

DESCRIPTION OF ADULT MALES

Colorations were described for specimens mounted in gum-chloral.

Subgenus *Polypedilum*

Polypedilum (*Polypedilum*) *akisplendens*, sp. nov.

Coloration. Head reddish brown. Antennal flagella and plumes yellowish brown. Palpi dark brown. Scutum dark brown ; scutal stripes indistinguishable. Scutellum light brown. Postnotum dark brown. Halteres dark brown. Front femora and tibiae dark brown, femoral base and tip slightly paler (Fig. 1A). Front tarsomeres I-III yellow, apically darkened. Front tarsomeres IV and V also yellow, distal halves darkened. Middle and hind femora and tibiae brown to dark brown, with subapical broad yellow rings on femora (Fig. 1A). Middle and hind tarsomeres yellow. Abdominal terga yellowish, slightly darkened distally. Hypopygium brown.

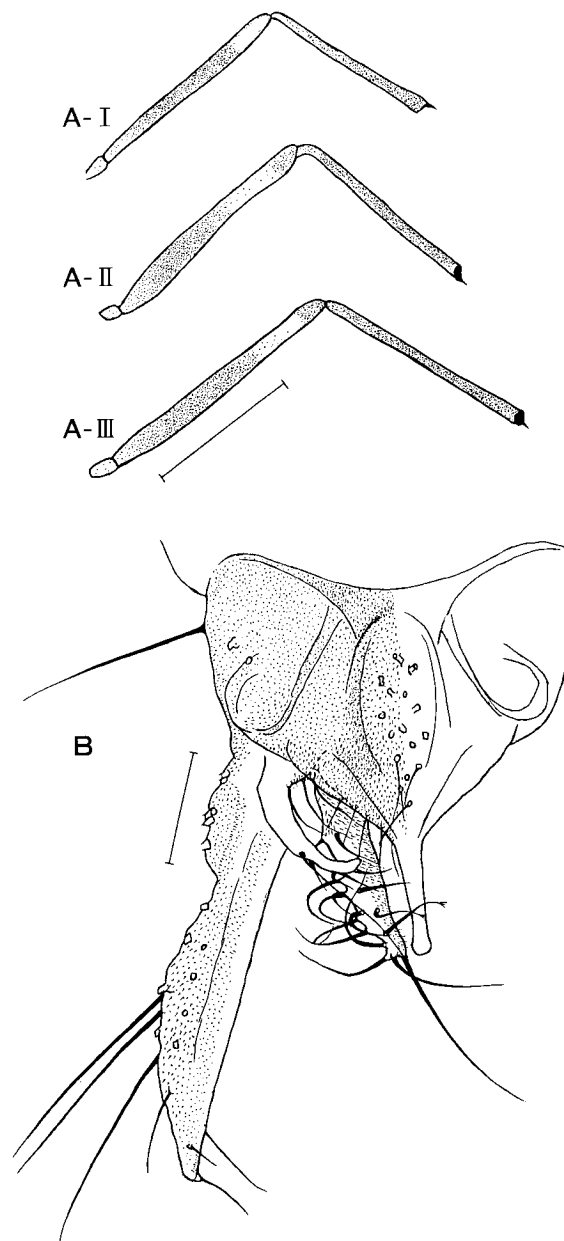


Fig. 1. *Polypedilum* (*Polypedilum*) *akisplendens*, sp. nov. Male. A-I, II and III, femur and tibia of fore, middle and hind leg, respectively. Scale : 1 mm ; B, hypopygium. Scale : 0.1 mm.

Structure. AR : 1.00-1.16, SO : 16-24. Eyes with strong dorsomedial extensions, ER : 0.15-0.26. Frontal tubercles absent. CL : 28-44, PN : 0, DM : 14-24, DL : 15-28, SA : 4-9, SC : 21-40, SQ : 14-39. Wing membrane without any clouds or markings. Anal lobe well developed, with rectangular margin. Costa not extended ; R_{2+3} running separately both from

R_1 and R_{4+5} , ending closer to tip of R_1 than to tip of R_{4+5} ; R_{4+5} ending slightly distal to tip of M; FCu far beyond RM. LR1 : 1.43-1.57, LR2 : 0.48-0.55, LR3 : 0.64-0.70, TR1 : 0.26-0.31, BR2 : 3.0-4.1, BR3 : 5.9-6.6. Terminal scales of front tibiae sharply pointed apically. Hypopygium (Fig. 1B) with anal tergite bands widely separated; anal point slender, parallel-sided, slightly expanded apically; dorsal appendage gradually curved, tapering to weakly hooked tip, with 3-4 basal setae and a lateral seta inserted at about distal 1/3, with an additional lateral seta sometimes inserted about midway; ventral appendage straight, tapered, with a long straight apical seta and 16-18 recurved setae, which are distributed at about apical 3/4.

Size. BL : 3.71-6.22 mm. WL : 1.78-2.66 mm.

Larval habitat. Rapids of mountain streams.

Type material. Holotype : ♂, Ohta River, Daka, Yoshiwa, Hiroshima, Japan, 13 October 1994, K. KAWAI, EM. Paratypes : ♂, same data as holotype; ♂, Osa River, Miyaji, Geihoku, Hiroshima, 4 October 1994, KK, EM; ♂, Kurose River, Shino, Hachihonmatsu, Hiroshima, 18 October 1994, KK, EM; ♂, Nenotani River, Shimohata, Chiyoda, Hiroshima, 15 November 1994, KK, EM; 2 ♂♂, Omoji River, Ohata, Kabe, Hiroshima, 4 October 1994, KK, EM; 2 ♂♂, Kawazu River, Ichikawa, Shiraki, Hiroshima, 21 November 1994, KK, EM; 2 ♂♂, Eido River, Furuya, Shiraki, Hiroshima, 21 November 1994, KK, EM.

Remarks. This species is a member of the *nubeculosum* group since it has a horn-like dorsal appendage with a lateral seta. It resembles *P. tamaharaki* SASA in having a ventral appendage extensively but sparsely covered with strong setae. However, it clearly differs from the latter in having middle and hind femora with a distinct subapical broad yellow ring, and abdominal terga VII and VIII which are only slightly darkened; in *tamaharaki*, the middle and hind femora are uniformly dark brown, as are the abdominal terga VII and VIII (SASA, 1983).

Polypedilum (Polypedilum) albiventris, sp. nov.

Coloration. Head brown. Antennal flagella and plumes yellowish brown. Palpi whitish. Scutal background dark brown; scutal stripes blackish, indistinguishable. Scutellum brown. Postnotum dark brown. Halteres white. Legs predominantly whitish, basal halves of femora slightly darkened.

Structure. AR : 1.29, SO : 9-10. Eyes with distinct dorsomedial extensions. Frontal tubercles prominent and finger-like. CL : 10, PN : 0, DM : 16, DL : 13, SA : 5-6, SC : 14, SQ : 9. Wing membrane without markings or clouds. Anal lobe well developed, with rounded margin. Costa not extended; R_{2+3} running separately both from R_1 and R_{4+5} , ending closer to tip of R_1 than to tip of R_{4+5} ; R_{4+5} ending distal to tip of M; FCu far beyond RM. LR1 : 1.57, LR2 : 0.46, LR3 : 0.69, TR1 : 0.23, BR2 : 4.4, BR3 : 7.2. Terminal scales of front tibiae spur-like and sharply pointed. Hypopygium (Fig. 2) with anal tergite bands widely separated; anal point gradually tapering to rounded apex; dorsal appendage horn-like, slightly curved

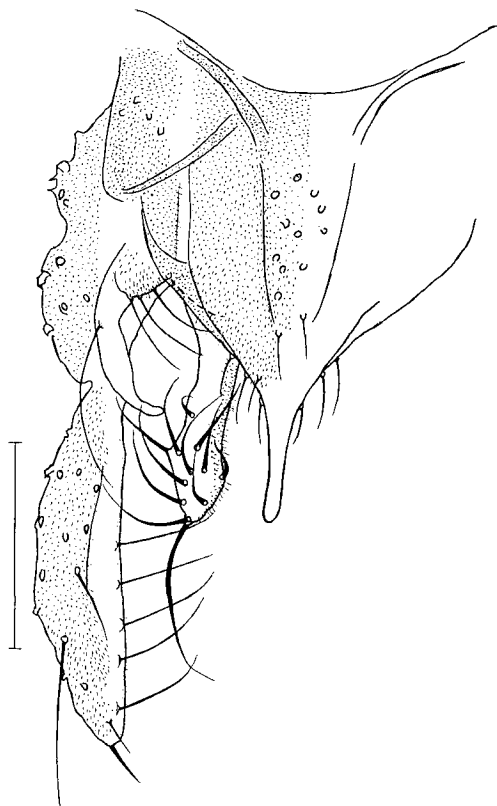


Fig. 2. Male hypopygium of *Polypedilum* (*Polypedilum*) *albiventris*, sp. nov. Scale : 0.1 mm.

inwardly, abruptly narrowed distally, with rounded apex and with 3-4 basal setae and a long lateral seta inserted about midway ; ventral appendage almost straight, slightly expanded distally, with a long straight apical seta and about 10 recurved setae distributed along distal half ; gonostylus slender, apically pointed, widest about midway, and with straight inner margin.

Size. BL : 4.49 mm. WL : 2.10 mm.

Larval habitat. Mountain streams.

Type material. Holotype : ♂, Nuta River, Kamitono, Fukutomi, Hiroshima, October 1995, KK, LT.

Remarks. This species is a member of the *nubeculosum* group since it has a horn-like dorsal appendage with a lateral seta. It resembles *P. albicorne* (MEIGEN) in having a dorsal appendage medially slightly swollen and distally narrowed, but it clearly differs from the latter in having a shorter anal point and a whitish abdomen ; in *albicorne*, the anal point is very long and the abdomen black (EDWARDS, 1929).

Polypedilum (*Polypedilum*) *crassistyla*, sp. nov.

Coloration. Antennal flagella and plumes brown. Head brownish. Palpi

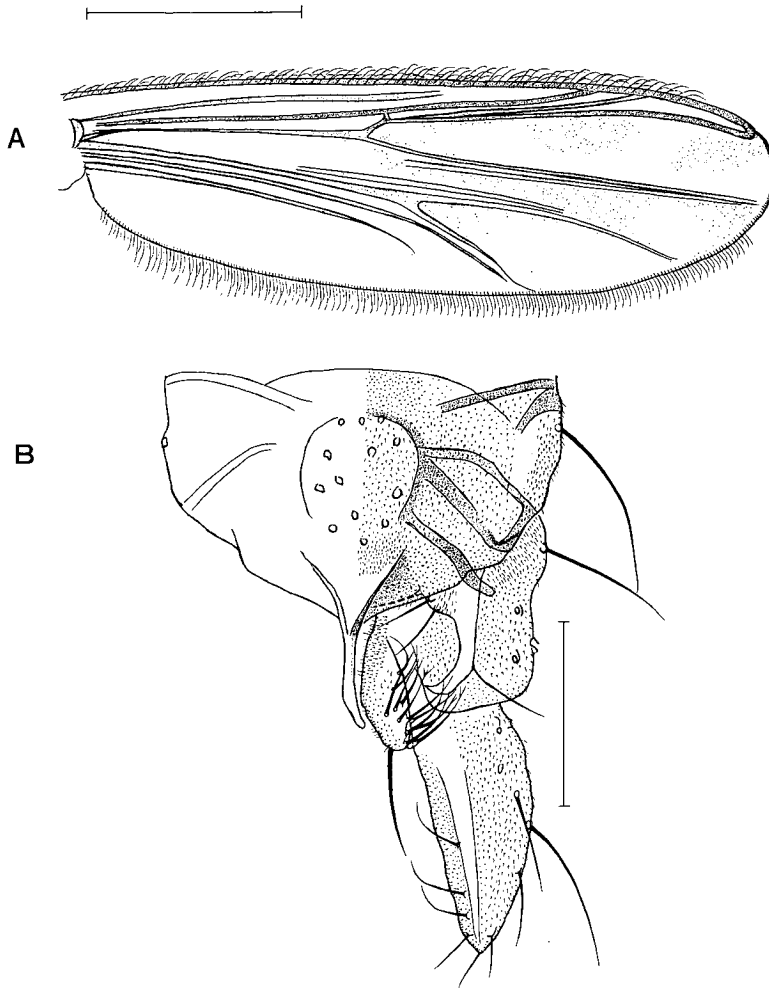


Fig. 3. *Polypedilum (Polypedilum) crassistyla*, sp. nov. Male. A, wing. Scale : 0.5 mm ; B, hypopygium. Scale : 0.1 mm.

brown. Scutum yellowish brown, scutal stripes indistinguishable. Scutellum brown. Postnotum dark brown. Wing with only faint clouds as in Figure 3A ; apical, middle and basal patches in cell R_5 , apical and subapical patches in cell M, a basal patch in cell Cu_1 and a middle patch in cell An. Halteres whitish. Legs yellowish, basal 2/3 of front femora slightly infuscated. Abdomen brown, caudomedial portions of terga VII and VIII pale.

Structure. AR : 1.67-1.71, SO : 10-12. Eyes with distinct dorsomedial extensions, ER 0.27-0.29. Frontal tubercles minute, thumb-like. CL : 20-22, PN : 0, DM : 15, DL : 13-16, SA : 4-5, SC : 11-12, SQ : 5-6. Anal lobe moderately developed, with rounded margin. Costa not extended ; R_{2+3} running separately both from R_1 and R_{4+5} and ending closer to tip of R_1 than to tip of R_{4+5} ; R_{4+5} ending above tip of M ; FCu far beyond RM. LR1 : 1.98, LR2 : 0.65, LR3 : 0.70-0.72, BR1 : 2.6, BR2 : 3.5-5.4, BR3 : 4.3-6.2.

Terminal scales of front tibiae triangular, sharply pointed. Hypopygium (Fig. 3B) with anal tergite bands widely separated; anal point long, slightly expanded subapically, and with rounded apex; dorsal appendage sickle-shaped, directed backwards and rather abruptly curved, with 3 basal setae and a lateral seta inserted at about distal 1/3; ventral appendage slightly swollen distally, with a long straight apical seta and 12-13 recurved setae distributed along distal 1/3; gonostylus stout, widest at about basal 1/3, pointed apically, and with almost straight inner margin.

Size. BL : 3.54-3.56 mm. WL : 1.56-1.59 mm.

Larval habitat. Mountain streams.

Type material. Holotype : ♂, Nuta River, Kamitono, Fukutomi, Hiroshima, October 1995, KK, LT. Paratype : ♂, same data as holotype.

Remarks. This species is a member of the *nubeculosum* group since it has a horn-like dorsal appendage with a lateral seta. It resembles *P. nubifer* (SKUSE) in having faint markings in cells R_5 , M, Cu, and An on wing. However, it clearly differs from the latter in having a backwardly directed dorsal appendage with a distinct lateral seta; in *nubifer*, dorsal appendage is directed inwards and without lateral seta (SASA and SUBLETTE, 1980).

Polypedilum (Polypedilum) fuscovittatum, sp. nov.

Coloration. Head yellowish brown. Antennal flagella and plumes dark brown. Palpi blackish. Scutal ground yellow, median line of scutum and margins of lateral stripes darkened. An area between the two lateral stripes has a transverse dark brown band. Scutellum brown. Postnotum dark brown. Halteres brown. Legs yellowish, front femora and tibiae brown, femoral base paler, middle femora and basal halves of middle tibiae brown, femoral base slightly paler, hind femoral tip and tibial base darkened. Abdominal terga I-VIII yellowish. Hypopygium brown.

Structure. AR : 2.25. SO : 14-16. Eyes with strong dorsomedial extensions, ER : 0.22-0.25. Frontal tubercles absent. CL : 38-46, PN : 0, DM : 26-30, DL : 31-38, SA : 7-10, SC : 27-40, SQ : 16-27. Wing membrane without any clouds or markings. Anal lobe well developed, with rectangular margin. Costa not extended; R_{2+3} running separately both from R_1 and R_{4+5} and ending closer to tip of R_1 than to tip of R_{4+5} ; R_{4+5} ending above tip of M; FCu slightly beyond RM. LR1 : 1.39, LR2 : 0.62, LR3 : 0.73-0.74, TR1 : 0.28-0.30, BR2 : 6.4, BR3 : 4.6-7.1. Terminal scales of front tibiae triangular, not sharply pointed apically. Hypopygium (Fig. 4) with anal tergite bands widely separated; anal point only slightly tapered to the rounded apex; dorsal appendage sickle-shaped, gradually curved inwardly and tapered and hooked apically, with 3-4 basal setae and a lateral seta inserted at about basal 1/3; ventral appendage straight, robust and slightly swollen distally, with a long straight apical seta, and 9-11 recurved setae distributed along distal half; gonostylus slender, widest at middle and with straight inner margin.

Size. BL : 4.10-4.22 mm. WL : 1.76-1.95 mm.

Larval habitat. Rapids of mountain streams.

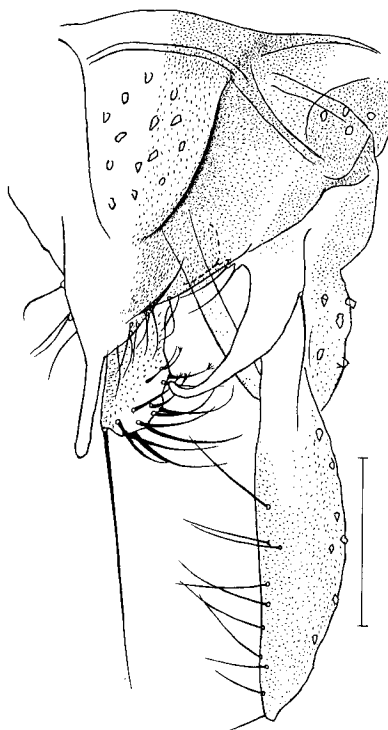


Fig. 4. Male hypopygium of *Polypedilum* (*Polypedilum*) *fuscovittatum*, sp. nov. Scale : 0.1 mm.

Type material. Holotype : ♂, Eido River, Furuya, Shiraki, Hiroshima, 21 November 1994, KK, EM. Paratype : ♂, Mukunashi River, Kajiya, Toyosaka, Hiroshima, 24 November 1994, KK, EM.

Remarks : This species is a member of the *nubeculosum* group since it has a horn-like dorsal appendage with a lateral seta. It resembles *P. tamahosohige* SASA and *P. tobaoctavum* KIKUCHI *et* SASA in having a gradually tapered dorsal appendage with a wide base. However, it clearly differs from *P. tamahosohige* in having a yellowish scutum and abdomen ; in *tamahosohige*, scutum and abdomen are dark brown (SASA, 1983). It also clearly differs from *P. tobaoctavum* in having an apically rounded ventral appendage and yellowish abdominal terga VII and VIII; in *tobaoctavum*, ventral appendage is apically pointed and abdominal terga VII and VIII are dark brown (KIKUCHI and SASA, 1990).

Polypedilum (*Polypedilum*) *paranigrum*, sp. nov.

Coloration. Head dark brown. Antennal flagella and plumes yellowish brown. Palpi whitish. Scutum dark brown, stripes indistinguishable. Scutellum yellowish brown. Postnotum dark brown. Halteres white. Legs yellow, tibial bases of all legs slightly darkened, basal halves of all femora brown. Abdomen yellow, slightly darkened distally.

Structure. AR : 1.28, SO : 13. Eyes with strong dorsomedial extensions.

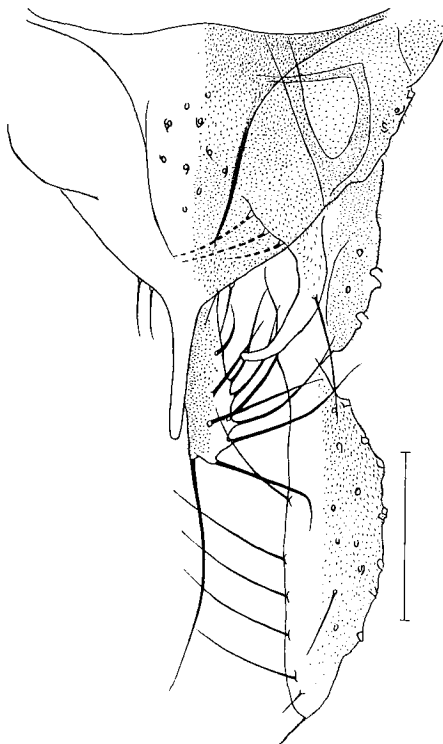


Fig. 5. Male hypopygium of *Polypedilum* (*Polypedilum*) *paranigrum*, sp. nov. Scale : 0.1 mm.

Frontal tubercles absent. CL : 13, PN : 0, DM : 19, DL : 17-18, SA : 5, SC : 14, SQ : 8-9. Wing membrane without any clouds or markings. Anal lobe moderately developed, with rounded margin. Costa not extended ; R_{2+3} running separately both from R_1 and R_{4+5} and ending closer to tip of R_1 than to tip of R_{4+5} ; R_{4+5} ending slightly distal to tip of M ; FCu far beyond RM. LR1 : 1.45, LR2 : 0.46, LR3 : 0.63, TR1 : 0.23. Terminal scales of front tibiae sharply pointed. Hypopygium (Fig. 5) with anal tergite bands widely separated ; anal point gradually tapering to rounded apex ; dorsal appendage sickle-shaped, gradually curved, rather abruptly narrowed apically, with 2-3 basal setae and a lateral seta inserted about midway ; ventral appendage straight, slightly swollen apically, with a long straight seta and 9-10 recurved setae distributed along about distal 3/5 ; gonostylus slender, widest about midway, with almost straight inner margin.

Size. BL : 3.03 mm. WL : 1.66 mm.

Larval habitat. Rapids of mountain streams.

Type material. Holotype : ♂, Ohta River, Daka, Yoshiwa, Hiroshima, 13 October 1994, KK, EM.

Remarks. This species is a member of the *nubeculosum* group since it has a horn-like dorsal appendage with a lateral seta. It resembles *P. kunigamiense* SASA et HASEGAWA in having a ventral appendage covered with

recurved setae on about distal 3/5 and a medially wide gonostylus with straight inner margin, but clearly differs from the latter in having a slightly tapered anal point and yellowish abdomen and legs ; in *kunigamiense*, anal point is parallel-sided, and abdomen and legs are brown to dark brown (SASA and HASEGAWA, 1983). It also resembles *P. tamanigrum* SASA in having a narrow dorsal appendage, but clearly differs from the latter in having a distally curved dorsal appendage and a yellowish abdomen ; in *tamanigrum*, dorsal appendage is almost straight and abdomen dark brown (SASA, 1983).

Subgenus *Tripodula*

Polypedilum (*Tripodula*) *pseudomasudai*, sp. nov.

Coloration. Antennal flagella and plumes brown. Head brown. Palpi yellowish. Scutum orange yellow, scutal stripes indistinguishable. Scutellum yellowish brown. Postnotum dark brown. Wing with several cloudy markings as in Figure 6A ; two in basal half of cell R_5 ; two at middle and tip of cell M ; one at tip of cell Cu_1 ; one around vein Cu_2 ; and one in middle of cell An. Halteres brown. Legs yellowish, anterior femora and basal 2/3 of middle and hind femora brownish, middle and hind tibiae slightly darkened distally. Abdominal terga brown.

Structure. AR : 0.86. SO : 9–11. Eyes with strong dorsomedial extensions, ER : 0.23–0.29. Frontal tubercles absent. CL : 12–18, PN : 0, DM : 14–15, DL : 9–14, SA : 3, SC : 6, SQ : 5–7. Anal lobe slightly developed. Costa not extended ; R_{2+3} running separately both from R_1 and R_{4+5} , ending much distal to tip of R_1 ; R_{4+5} ending proximal to tip of M ; FCu far beyond RM. LR2 : 0.64–0.67, LR3 : 0.72. Terminal scales of front tibiae sharply pointed apically. Hypopygium (Fig. 6B) with anal tergite bands widely separated ; anal point short and weak, tapering to pointed apex ; dorsal appendage rectangular, pad-like, pubescent throughout the surface, with a long lateral seta, 3 long distal setae and 3 short inner setae ; ventral appendage parallel-sided, slender, with a long apical seta and 18–22 recurved short setae distributed along distal half ; gonostylus long, slender, widest at middle, pointed apically and with straight inner margin.

Size. BL : 2.00–2.32 mm. WL : 0.95–1.05 mm.

Larval habitat. Lower reaches of rivers.

Type material. Holotype : ♂, Nagara River, Takehana, Hashima, Gifu, Japan, 11 October 1993, S. KASUYA, LT. Paratypes : 2 ♂♂, the same location as the holotype, 6 September 1993, SK, LT.

Remarks. This species resembles *P. masudai* TOKUNAGA in having brownish body coloration and a slender ventral appendage covered with short recurved setae on distal half. However, it clearly differs from the latter in having a wing with only 2 cloudy markings in cell R_5 , a distally only weakly expanded dorsal appendage and a much shorter anal point ; in *masudai*, wing has 3 markings in cell R_5 , dorsal appendage is strongly expanded distally and anal point is very long (TOKUNAGA, 1938).

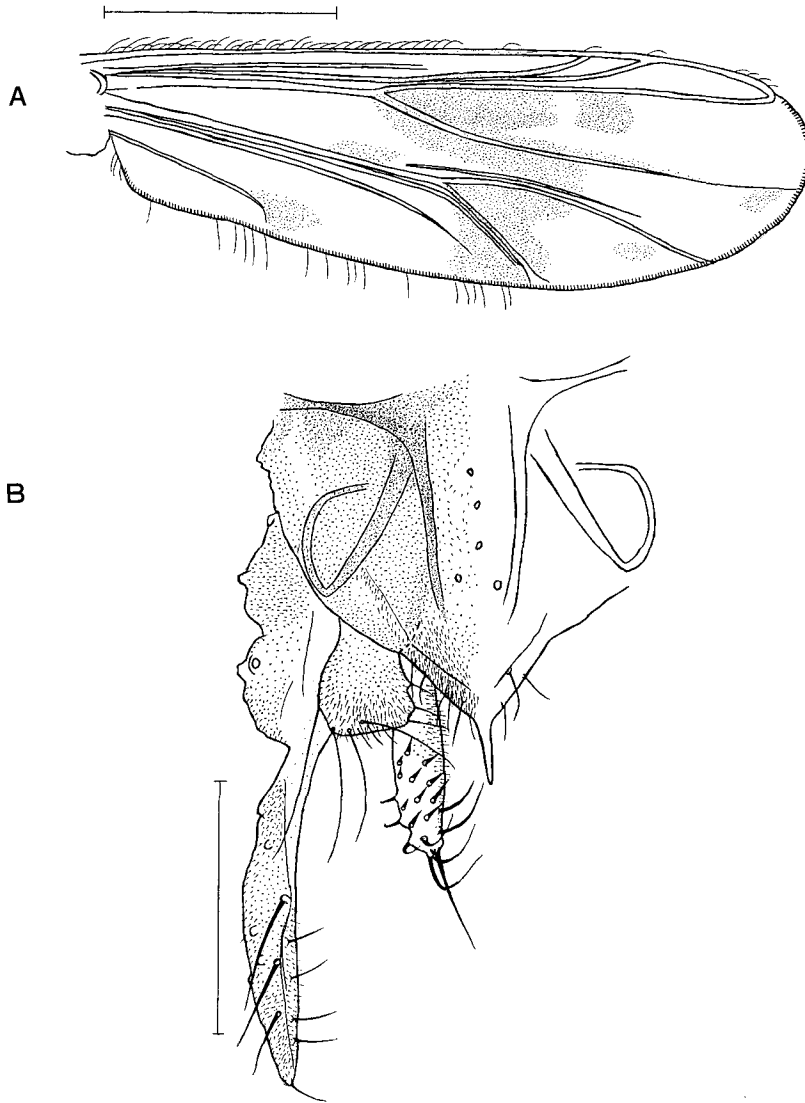


Fig. 6. *Polypedilum* (*Tripodula*) *pseudomasudai*, sp. nov. Male. A, wing. Scale : 0.5 mm; B, hypopygium. Scale : 0.1 mm.

Subgenus *Uresipedilum*

Polypedilum (*Uresipedilum*) *bingoparadoxum*, sp. nov.

Coloration. Head yellowish brown. Antennal flagella and plumes dark brown. Palpi grayish brown. Scutal ground yellowish brown ; lateral scutal stripes dark brown, rather conspicuous ; median stripe indistinguishable. Scutellum yellowish. Postnotum dark brown. Halteres dark brown. Legs yellowish ; femoral tips and tibial bases of all legs slightly darkened ; front tarsomeres II-V, and middle and hind tarsomeres VI and V slightly darkened. Abdominal terga yellowish. Hypopygium brown.

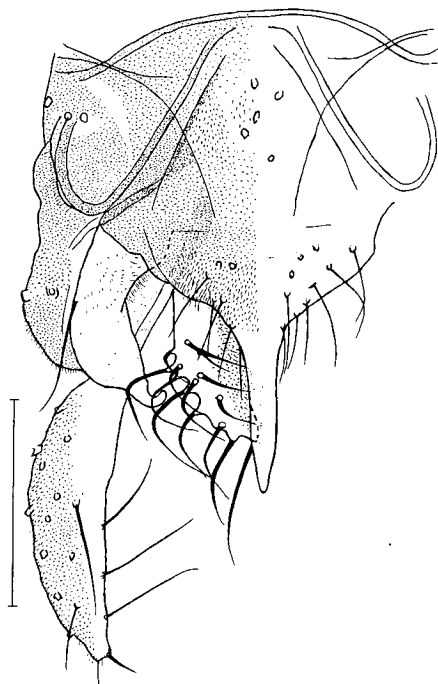


Fig. 7. Male hypopygium of *Polypedilum (Uresipedilum) bingoparadoxum*, sp. nov. Scale : 0.1 mm.

Structure. AR : 1.27-1.63, SO : 11-16. Eyes with strong dorsomedial extensions, ER : 0.15-0.20. Frontal tubercles absent. CL : 14-25, PN : 0, DM : 16-22, DL : 17-23, SA : 4-7, SC : 13-21, SQ : 11-22. Wing membrane without any clouds or markings. Anal lobe moderately developed, with rounded margin. Costa not extended ; R_{2+3} running separately both from R_1 and R_{4+5} and ending very close to tip of R_1 ; R_{4+5} ending above the tip of M ; FCu far beyond RM. LR1 : 1.70-1.86, LR2 : 0.53-0.61, LR3 : 0.67-0.77, TR1 : 0.26-0.36, BR1 : 2.3-3.4, BR2 : 3.8-5.5, BR3 : 4.8-8.6. Terminal scales of front tibiae sharply pointed. Hypopygium (Fig. 7) with anal tergite bands widely separated ; anal point robust, nearly parallel-sided and abruptly tapered to near pointed apex ; dorsal appendage robust, like an 'arm', and abruptly narrowed apically to form a 'hook', with 2 basal setae and a lateral seta inserted at about basal 1/3 ; ventral appendage short, robust, with a long straight apical seta and 13-15 recurved setae distributed along distal half ; gonostylus short, robust, widest about midway and with straight inner margin.

Size. BL : 3.05-3.66 mm. WL : 1.66-1.90 mm.

Larval habitat. Rapids of mountain streams.

Type material. Holotype : ♂, Kaya River, Fujio, Shin-ichi, Hiroshima, 9 November 1994, KK, EM. Paratypes 7 ♂♂, same data as holotype ; 4 ♂♂, Eido River, Furuya, Shiraki, Hiroshima, 21 November 1994, KK, EM.

Remarks. This species resembles *P. nuzesecundum* SASA and *P. pedatum*

TOWNES in having a dorsal appendage with a low posterior lobe and a single lateral seta, but clearly differs from *P. nuzesecundum* in having a low but long posterior lobe of dorsal appendage, a conspicuously hooked inner blade of dorsal appendage, and a long and lobust anal point ; in *nuzesecundum*, posterior lobe of dorsal appendage is low and short, inner blade of dorsal appendage slightly hooked, and anal point is short and triangular (SASA, 1996). It also clearly differs from *P. pedatum* in having a conspicuously hooked inner blade of dorsal appendage and a robust anal point ; in *pedatum*, inner blade of dorsal appendage is almost straight, and anal point narrow (TOWNES, 1945).

ACKNOWLEDGEMENTS

We are very grateful to Dr. S. KASUYA, Faculty of Regional Science, Gifu University, and Mr. S. NAKAMA and Ms. K. TOKUSHIGE, former collaborators, for their help in chironomid collection. We are also indebted to Dr. M. YAMAMOTO, Kankyo-kagaku Co., Ltd., for his valuable advice on chironomid taxonomy.

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(Received : 21 August 1997 ; Accepted : 25 May 1998)

日本産 *Polypedilum* 属 7 新種

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摘 要

雄成虫の形態に基き、3 亜属に属する日本産 *Polypedilum* 属 7 未記載種を新たに記載した。これらのうち、*P. akisplendens*, *P. albiventris*, *P. crassistyla*, *P. fuscovittatum*, *P. paranigrum* の 5 種は *Polypedilum* 亜属に属し、*P. pseudomasudai* 及び *P. bingoparadoxum* は、それぞれ *Tripodula* 亜属及び *Uresipedilum* 亜属に属している。